

**United States Patent** [19]  
**Roberts et al.**

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- [54] **METHOD AND APPARATUS FOR REMOTE TALK/LISTEN COMMUNICATION SYSTEM**  
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[58] **Field of Search** ..... 379/58, 59, 60, 63,  
379/57; 455/33, 54, 14, 17, 18

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[57] **ABSTRACT**

A vehicle mounted mobile transceiver having a first and second frequency (11) communicates via a secondary mobile unit (51) with a short range portable unit (10). The portable unit (10) can be either a cordless microphone or a transceiver having a third and fourth frequency. The portable unit (10) allows a remotely positioned operator to transmit messages to a base station (13). To ensure security and reliable operation, the portable and vehicle mounted units use range burst signals and missed message signals to monitor receipt of data signals at the portable unit. The portable and secondary mobile unit communicate with one another via a first pair of frequencies and the vehicle mounted mobile transceiver and the base station communicate with one another via a second pair of different frequencies.

**9 Claims, 17 Drawing Sheets**





